

# 2007 Mississippi State University Combined Research and Extension Annual Report

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## I. Report Overview

### 1. Executive Summary

This Plan of Work Report is a joint report from the Mississippi State University Extension Service (MSU-ES) and the Mississippi Agricultural and Forestry Experiment Station (MAFES) on 1862 extension and research efforts. The report is divided among 26 programs defined in the Five-Year Plan.

This reports includes efforts and results related to a total Hatch appropriation of \$6,506,955 and a total Smith-Lever appropriation of \$6,766,873.

During FY 2007, MSU-ES professionals (239.22 total FTE) carried out 122,824 educational activities with a total of 3,603,790 contacts. In FY 07 MAFES had 250 grants awarded for a total of over \$25 million.

#### Total Actual Amount of professional FTEs/SYs for this State

Year:2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	191.0	0.0	53.0	0.0
<b>Actual</b>	239.2	0.0	286.1	0.0

## II. Merit Review Process

### 1. The Merit Review Process that was Employed for this year

- Internal University Panel
- Combined External and Internal University External Non-University Panel
- Expert Peer Review

### 2. Brief Explanation

Research projects utilized both an internal university panel and an expert peer review as part of the regional research networks. These reviews covered all aspects of research project proposals, including scientific merit, budgets, and suitability of the research mission for the unit, experiment station, and regional consortium. In addition, commodity-specific advisory committees are used to make research as applicable as possible to the state's needs.

Extension programs underwent an internal university panel review. This review takes into consideration the need for the program (including stakeholder input), the methods utilized, the audience identified, and the methods for outcome/impact evaluation. Each of the programs has an advisory panel which reviewed programs in terms of the need, resources allocated, and expected outcomes.

## III. Stakeholder Input

### 1. Actions taken to seek stakeholder input that encouraged their participation

- Use of media to announce public meetings and listening sessions
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder individuals
- Survey specifically with non-traditional groups
- Survey specifically with non-traditional individuals

#### Brief Explanation

Efforts to determine economic, social, and environmental issues began with County Extension Advisory Councils. Further needs assessment was carried out through Research and Extension Center Advisory Councils, and through formal and informal interaction with other stakeholders. Issues identified include concerns to be addressed with Extension and/or research programs.

#### County Extension Advisory Councils

As a formal process, key clientele met under the leadership of county Extension professionals to review results of programs and identify key issues to be addressed in the county or area. Input came from three different groups: the Overall Extension Advisory Council, Program Advisory Councils, and other stakeholders.

#### Overall Extension Advisory Councils

MSU-ES has an Overall Extension Advisory Council in each county. These advisory councils meet a minimum of two times per year to discuss programming efforts, evaluate programs, legitimize program efforts, assess needs for future programming, and identify human and financial resources needed for county programming. This group includes leaders who provide input from business, social, and economic entities as well as those who represent the needs of underserved and underrepresented clientele.

#### Program Advisory Councils

Program and/or commodity advisory groups in each county act as subcommittees of the overall advisory council, including people who represent the interests of agriculture, family & consumer sciences, 4-H youth, and community/rural development issues. These groups meet at least two times per year to identify specific areas of program needs, delivery and evaluation.

#### Other Stakeholders

MSU-ES county agents are also required to obtain information regarding clientele needs from people outside the advisory councils. They must give special attention to key community leaders and representatives of underserved populations, making sure all groups who are possible beneficiaries of MSU-ES programming efforts are included. These groups meet several times during the year to offer input and react to Extension's efforts to address key issues in the community.

#### Research and Extension Center Advisory Councils

MSU has four area Research and Extension Centers (Delta, Northeast, Central, and Coastal) jointly administered by MSU-ES and MAFES. These centers each have an overall advisory council where stakeholders led discussions about programming and research efforts and assessed needs. Various subgroups of the advisory councils met several times during the year to discuss specific needs in research and extension programming.

#### Key Partners

MSU-ES and MAFES met with key partners throughout the year to discuss efforts and results, coordinate activities, and set priorities. These key partners include such organizations as the Mississippi Farm Bureau, Natural Resources Conservation Service, Delta Council, Rural Development Offices, Mississippi Forestry Commission, Mississippi Department of Wildlife, Fisheries, and Parks, Mississippi Department of Agriculture and Commerce, and numerous state and regional commodity groups.

## **2(A). A brief statement of the process that was used by the recipient institution to identify individuals and groups stakeholders and to collect input from them**

### **1. Method to identify individuals and groups**

- Use Advisory Committees
- Open Listening Sessions
- Needs Assessments

#### **Brief Explanation**

The collection of input from stakeholders is an ongoing process with both MSU-ES and MAFES. This was described in the previous section. Advisory committees are required to be reflective of the population of potential clientele. Listening sessions have been held for the general public through the area research and extension centers, including sessions specifically designed to reach under-served populations. The process began with county extension personnel identifying stakeholders, along with promotion of the meetings to the general public for their participation.

## **2(B). A brief statement of the process that was used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them**

### **1. Methods for collecting Stakeholder Input**

- Meeting with traditional Stakeholder groups
- Survey of traditional Stakeholder groups
- Meeting with the general public (open meeting advertised to all)
- Meeting specifically with non-traditional groups
- Survey specifically with non-traditional groups
- Survey specifically with non-traditional individuals

**Brief Explanation**

Meetings with traditional stakeholder groups, the general public, and specifically with non-traditional groups are an on-going part of the needs assessment process conducted by MSU-ES and MAFES.

Surveys of traditional stakeholder groups and non-traditional groups and individuals were conducted in specific situations. For example, this year a special needs-assessment survey was developed for women in agriculture, and a survey for county youth needs assessment was conducted by 4-H professionals in some counties.

**3. A statement of how the input was considered**

- To Identify Emerging Issues
- Redirect Extension Programs
- Redirect Research Programs
- In the Action Plans
- To Set Priorities

**Brief Explanation**

Stakeholder input influences most aspects of this Plan of Work. Issues were identified through the needs assessment process discussed earlier. The issues helped extension agents and specialists determine their plans of action, including redirecting programs to meet clientele needs. Administration provided the resources to accomplish these changes, including setting new priorities or revising existing priorities, and hiring appropriate staff members as required to address the priorities.

**Brief Explanation of what you learned from your Stakeholders**

The following include examples of key stakeholder input items.

1. Both traditional advisory groups and other key stakeholders (e.g., Mississippi Department of Health) identified health concerns, specifically obesity, as a key issues facing Mississippians. As a result, the Mississippi in Motion project was expanded and will continue to be expanded to help fight obesity.

2. Because of extensive use of transgenic varieties (primarily glyphosate resistant) in corn, cotton, and soybean production, commodity advisory groups identified resistant weed varieties as a growing concern. As a result, both research and extension will focus efforts on ameliorating this problem.

**IV. Expenditure Summary**

1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)			
Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
6548838	0	6506955	0

<b>2. Totaled Actual dollars from Planned Programs Inputs</b>				
	<b>Extension</b>		<b>Research</b>	
	<b>Smith-Lever 3b &amp; 3c</b>	<b>1890 Extension</b>	<b>Hatch</b>	<b>Evans-Allen</b>
<b>Actual Formula</b>	6548838	0	5151500	0
<b>Actual Matching</b>	6548838	0	5182021	0
<b>Actual All Other</b>	0	0	27766023	0
<b>Total Actual Expended</b>	13097676	0	38099544	0

<b>3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous years</b>				
<b>Carryover</b>	0	0	0	0

## V. Planned Program Table of Content

S. NO.	PROGRAM NAME
1	Children, Youth, and Families at Risk
2	4-H Community Club Development
3	4-H Military Program
4	Volunteerism and Community Service for Youth
5	Agronomic Crops
6	Animal Production
7	Animal Protection
8	Aquaculture Production
9	Aquaculture Health
10	Forestry
11	Horticulture
12	Nutrient Management/Water Quality
13	Poultry
14	Wildlife and Fisheries
15	Early Care and Education
16	Family Resource Management
17	Human Health
18	Human Nutrition/Food Safety
19	Family Leadership Development
20	Family Life
21	Integrated Pest Management
22	Community and Business Analysis
23	Community Health
24	Community Leadership Development
25	Community Tourism Development
26	Agribusiness/Risk Farm Management
27	Local Government Education and Training

**Program #1**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Children, Youth, and Families at Risk

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
802	Human Development and Family Well-Being	10%		10%	
806	Youth Development	90%		90%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	17.0	0.0	0.0	0.0
<b>Actual</b>	3.2	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
89839	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
89839	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

MSU-ES Personnel carried out the following activities

- Provide leader training for teen and adult volunteers
- Provide training on organization and maintenance of clubs
- Provide recognition events for youth to exhibit project skills
  - 4-H Club Congress
  - District Achievement Days
  - County, State, & Regional Fairs

**2. Brief description of the target audience**

The target audience for this program is primarily youth from at-risk families. The audience will be approximately 40% caucasian, 58% African-American, and 5% other races.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	18765	9382	112590	187649
2007	11969	3483	27928	8127

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of Youth who join 4-H clubs.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	500	931

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of youth who improve life skills.
2	Number of youth who increase knowledge of subject matter areas.
3	Number of 4-H projects completed.
4	Number of 4-H clubs sustained at the local level.

**Outcome #1****1. Outcome Measures**

Number of youth who improve life skills.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	450	745

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
802	Human Development and Family Well-Being
806	Youth Development

**Outcome #2****1. Outcome Measures**

Number of youth who increase knowledge of subject matter areas.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	450	2406

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development
802	Human Development and Family Well-Being

**Outcome #3****1. Outcome Measures**

Number of 4-H projects completed.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	400	10

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
802	Human Development and Family Well-Being
806	Youth Development

**Outcome #4****1. Outcome Measures**

Number of 4-H clubs sustained at the local level.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	20	15

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done****Results****4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
802	Human Development and Family Well-Being
806	Youth Development

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Appropriations changes
- Populations changes (immigration, new cultural groupings, etc.)

**Brief Explanation**

MSU overestimated the overall efforts we would undertake in this program. This has been addressed in the 2009-2013 plan.

**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Retrospective (post program)
- Comparisons between program participants (individuals, group, organizations) and non-participants

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #2**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

4-H Community Club Development

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%		100%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	17.0	0.0	0.0	0.0
<b>Actual</b>	64.2	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c 1814934	1890 Extension 0	Hatch 0	Evans-Allen 0
<b>1862 Matching</b> 1814934	<b>1890 Matching</b> 0	<b>1862 Matching</b> 0	<b>1890 Matching</b> 0
<b>1862 All Other</b> 0	<b>1890 All Other</b> 0	<b>1862 All Other</b> 0	<b>1890 All Other</b> 0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

MSU-ES personnel carried out the following activities:

•Recruite Youth and Volunteers    •Provided Volunteer Leader Training for Youth Leaders and Adult Volunteers    •Provided Training on organization and maintenance of community clubs    •Provided recognition events for youth to exhibit project skills:

- 4-H Club Congress
- District Achievement Days
- County, State, & Regional Fairs
- Livestock and Horse Shows

•Provided training to Extension personnel:

- Chartering 4-H Clubs
- Four Essential Elements
- Legal Use of the Name and Emblem
- Diversity Training
- Financial Management

**2. Brief description of the target audience**

All Mississippians between the ages of 6 and 18.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	37530	18765	93825	37530
2007	83436	95825	194685	223591

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	1	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of youth enrolled in 4-H Clubs.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	16000	16225

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Youth increase their development of life-skills
2	Youth increase knowledge of subject matter taught.
3	Youth increase their levels of participation in community service activities
4	Youth increase the number of 4-H projects completed.
5	4-H clubs increase their use of youth/adult partnerships.
6	Youth increase their involvement in leadership events and activities at the district, state, and national levels.
7	4-H members are active contributing citizens of their communities.

**Outcome #1****1. Outcome Measures**

Youth increase their development of life-skills

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	14500	13791

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #2****1. Outcome Measures**

Youth increase knowledge of subject matter taught.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	14500	13791

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
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**Outcome #3****1. Outcome Measures**

Youth increase their levels of participation in community service activities

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	8000	8113

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #4****1. Outcome Measures**

Youth increase the number of 4-H projects completed.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	8000	8113

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #5****1. Outcome Measures**

4-H clubs increase their use of youth/adult partnerships.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	200	211

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #6****1. Outcome Measures**

Youth increase their involvement in leadership events and activities at the district, state, and national levels.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	4000	4056

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

## Results

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

### Outcome #7

#### 1. Outcome Measures

4-H members are active contributing citizens of their communities.

#### 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	4000	525

#### 3c. Qualitative Outcome or Impact Statement

**Issue (Who cares and Why)**

**What has been done**

## Results

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

## V(H). Planned Program (External Factors)

### External factors which affected outcomes

- Natural Disasters (drought,weather extremes,etc.)
- Appropriations changes
- Populations changes (immigration,new cultural groupings,etc.)

### Brief Explanation

The number of children developing life skills and improving knowledge is estimated conservatively based on previous studies.The estimate is that at least 85% of 4-H club members accomplish these outcomes.

## V(I). Planned Program (Evaluation Studies and Data Collection)

### 1. Evaluation Studies Planned

- After Only (post program)

### Evaluation Results

Newman, Donaldson, and Lee conducted a study to determine the extent to which participants in a healthy decision making program developed life skills and gained knowledge.They found that over 97% of the participants improved their knowledge of the subject matter taught, while over 88% of the participants improved their life skills as a result of participating in the program.

**Key Items of Evaluation**

A 4-H program geared toward healthy decision making led to improved life skills (decision making) and increased knowledge of the subject (healthy lifestyles).

**Program #3**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

4-H Military Program

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%		100%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	6.0	0.0	0.0	0.0
<b>Actual</b>	0.5	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c 13885	1890 Extension 0	Hatch 0	Evans-Allen 0
<b>1862 Matching</b> 13885	<b>1890 Matching</b> 0	<b>1862 Matching</b> 0	<b>1890 Matching</b> 0
<b>1862 All Other</b> 0	<b>1890 All Other</b> 0	<b>1862 All Other</b> 0	<b>1890 All Other</b> 0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Activities:

•Build relationships with the partners who can identify military youth. •Provide information about 4-H and skills related workshops to military youth and their families at the following events: (build relationships and engage youth) •Deployments •Reunions •Family Days •National Guard Youth Symposium •National Guard Annual Training Camp •Military families participate at the local level by forming clubs or joining existing clubs •Mainstream military youth into ongoing 4-H activities that include:

- 4-H Club Congress
- 4-H Project Achievement Days
- Teen Leader Forums
- Mississippi State Fair

•Provide training to military personnel and their volunteers on Essential Elements of 4-H at the following events:

- State Volunteer Leaders Forum
- District Fall Volunteer Leaders Forum

6. Provide in service training to Extension personnel in working with military families.

**2. Brief description of the target audience**

The primary audience of this program is youth of military families. Other audiences include parents of military youth, volunteers, and agency and military partners.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	6255	3127	37530	18765
2007	844	684	2200	1596

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
Plan:	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1****Output Measure**

- Number of 4-H Clubs operating on military bases.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	2	3

**Output #2****Output Measure**

- Number of youth from military families participating in 4-H clubs and activities.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	250	220

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Military youth increase their knowledge of subject matter taught
2	Military youth increase their development of life skills
3	Military youth are active 4-H participants as evidenced by their involvement on the leadership team, district, state, and national event participation
4	Military adult family members are active in the District and State Volunteer Leaders Forum
5	4-H Clubs are sustained at Columbus and Keesler Air Force Bases and by National Guard families
6	Youth develop into productive citizens

**Outcome #1****1. Outcome Measures**

Military youth increase their knowledge of subject matter taught

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	230	161

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #2****1. Outcome Measures**

Military youth increase their development of life skills

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	230	161

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
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**Outcome #3****1. Outcome Measures**

Military youth are active 4-H participants as evidenced by their involvement on the leadership team, district, state, and national event participation

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	200	99

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #4****1. Outcome Measures**

Military adult family members are active in the District and State Volunteer Leaders Forum

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	20	8

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #5****1. Outcome Measures**

4-H Clubs are sustained at Columbus and Keesler Air Force Bases and by National Guard families

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	6	7

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #6****1. Outcome Measures**

Youth develop into productive citizens

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	150	121

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

## Results

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

### V(H). Planned Program (External Factors)

#### External factors which affected outcomes

- Appropriations changes
- Government Regulations

#### Brief Explanation

MSU overestimated the overall efforts we would undertake in this program. This has been addressed in the 2009-2013 plan.

### V(I). Planned Program (Evaluation Studies and Data Collection)

#### 1. Evaluation Studies Planned

- Retrospective (post program)

#### Evaluation Results

{No Data Entered}

#### Key Items of Evaluation

{No Data Entered}

**Program #4**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Volunteerism and Community Service for Youth

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%		100%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	17.0	0.0	0.0	0.0
<b>Actual</b>	10.4	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
292976	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
292976	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Activities:

- Collaborated with local Extension staff and current volunteers who can identify potential volunteers to assist with 4-H youth development
- Provided training opportunities at the area, district, state, and regional levels to strengthen the skills of all volunteers and youth leaders in 4-H.
- Extension staff in-service training
- District Volunteer Leaders Forums
- State 4-H Volunteer Leaders Conferences
- Regional 4-H Volunteer Leaders Forums

**2. Brief description of the target audience**

Youth and adult volunteers for the 4-H program.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	93825	37530	37530	18765
2007	23113	53283	9905	22835

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of volunteers attended local and district training.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	300	689

**Output #2**

**Output Measure**

- Number of volunteers attending state volunteer leaders conference.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	200	243

**Output #3**

**Output Measure**

- Number of volunteers attending the regional 4-H volunteer leaders forum

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	50	51

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Adult and youth volunteers increase their knowledge and skills in being effective volunteer leaders
2	Volunteers participating in training conferences incorporate their skills gained from training to work with 4-H clubs
3	Adult volunteers serve as managers of community 4-H clubs and recruiting other volunteers for the 4-H program
4	Youth leaders serve in leadership roles at the county, district and state levels
5	Volunteer-managed 4-H clubs are sustained at the local level.

**Outcome #1****1. Outcome Measures**

Adult and youth volunteers increase their knowledge and skills in being effective volunteer leaders

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	300	346

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #2****1. Outcome Measures**

Volunteers participating in training conferences incorporate their skills gained from training to work with 4-H clubs

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	200	346

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #3****1. Outcome Measures**

Adult volunteers serve as managers of community 4-H clubs and recruiting other volunteers for the 4-H program

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	200	213

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #4****1. Outcome Measures**

Youth leaders serve in leadership roles at the county, district and state levels

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	50	143

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**Outcome #5****1. Outcome Measures**

Volunteer-managed 4-H clubs are sustained at the local level.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	200	276

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
806	Youth Development

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Appropriations changes
- Competing Programmatic Challenges

**Brief Explanation**

MSU overestimated the overall efforts we would undertake in this program. This has been addressed in the 2009-2013 plan. The number of youth and adults developing life skills and improving knowledge is estimated conservatively based on previous studies. The estimate is that at least 85% of 4-H club members accomplish these outcomes.

**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Retrospective (post program)
- During (during program)

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #5**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Agronomic Crops

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	10%		10%	
111	Conservation and Efficient Use of Water	15%		15%	
132	Weather and Climate	5%		5%	
202	Plant Genetic Resources	5%		5%	
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants	10%		10%	
205	Plant Management Systems	30%		30%	
211	Insects, Mites, and Other Arthropods Affecting Plants	10%		10%	
212	Pathogens and Nematodes Affecting Plants	5%		5%	
213	Weeds Affecting Plants	10%		10%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	21.0	0.0	27.6	0.0
<b>Actual</b>	19.4	0.0	131.6	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
548920	0	3042849	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
548920	0	2349955	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	12565962	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Short courses, Workshops or Training Seminars  
 Field Consultations  
 Demonstration and Verification Programs  
 Newsletters and Publications  
 Web-based information and E-mail  
 Distance Learning Programs  
 Field Manuals or Guides

Farm Management Software/Components

**2. Brief description of the target audience**

The target audience for this program includes approximately 30,000 Mississippi crop producers, consultants, retail dealers and industry personnel.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	154572	38643	0	0
2007	53281	223056	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	1

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	11	70	81

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of producers attending seminars, workshops, short courses, and demonstrations.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	25762	46056

**Output #2**

**Output Measure**

- Number of articles/abstracts in journals, proceedings, and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	15	278

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of producers adopting new technologies, strategies, or systems.
2	Number of producers increasing production levels.
3	Number of producers decreasing production inputs/expenses.
4	Number of producers improving their environmental stewardship.

**Outcome #1****1. Outcome Measures**

Number of producers adopting new technologies, strategies, or systems.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	5000	9211

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
202	Plant Genetic Resources
205	Plant Management Systems

**Outcome #2****1. Outcome Measures**

Number of producers increasing production levels.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	4000	7369

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
202	Plant Genetic Resources
205	Plant Management Systems

**Outcome #3****1. Outcome Measures**

Number of producers decreasing production inputs/expenses.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2007	4000	7369

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
205	Plant Management Systems
202	Plant Genetic Resources

**Outcome #4****1. Outcome Measures**

Number of producers improving their environmental stewardship.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2007	2000	3684

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

## What has been done

### Results

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
202	Plant Genetic Resources
205	Plant Management Systems

#### V(H). Planned Program (External Factors)

##### External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Programmatic Challenges

##### Brief Explanation

#### V(I). Planned Program (Evaluation Studies and Data Collection)

##### 1. Evaluation Studies Planned

- Retrospective (post program)
- Case Study

##### Evaluation Results

##### Key Items of Evaluation

**Program #6****V(A). Planned Program (Summary)****1. Name of the Planned Program**

Animal Production

**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
301	Reproductive Performance of Animals	15%		15%	
302	Nutrient Utilization in Animals	20%		20%	
303	Genetic Improvement of Animals	20%		20%	
304	Animal Genome	5%		5%	
305	Animal Physiological Processes	10%		10%	
306	Environmental Stress in Animals	10%		10%	
307	Animal Management Systems	15%		15%	
308	Improved Animal Products (Before Harvest)	5%		5%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)****1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	11.5	0.0	4.8	0.0
<b>Actual</b>	16.3	0.0	25.5	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
460618	0	647520	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
460618	0	1460243	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	1717702	0

**V(D). Planned Program (Activity)****1. Brief description of the Activity**

Research and Extension programs were conducted in the following areas:

- Forage Testing
- Ration Recommendations
- Beef Quality Assurance
- Farm-to-Feedlot Project
- Stocker Grazing Program
- Forage Variety Evaluation Publications
- Annual Mississippi Dairy Enterprise Planning Budgets for various sizes of typical dairy operations in the state
- Workshops for dairy producers of the use and value of dairy budgets in the management of their dairy farms
- Enrollment on the Dairy Herd Improvement Assn.
- Heat Abatement Training
- DHIA herd management screening
- Statewide Dairy Field Day
- Dairy Nutrition Workshops
- Reproductive Management
- BCIA sponsored sales
- Swine Producers Extension Program
- Swine Managers Training
- Environmental Continuing Education Classes
- Dietary analyses and consultation
- Pork Quality Assurance Program
- Swine Welfare and Assurance Program

**2. Brief description of the target audience**

The target audience for this program includes beef, dairy, swine, and equine producers (full- and part-time) and related industry personnel.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	77059	19265	0	0
2007	36267	124860	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

Year	Target
Plan:	0
2007 :	1

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	Extension	Research	Total
Plan			
2007	3	20	23

**V(F). State Defined Outputs**

**Output Target**

**Output #1****Output Measure**

- Number of producers attending seminars, workshops, short courses, and demonstrations.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	12843	26855

**Output #2****Output Measure**

- Number of articles/abstracts in journals, proceedings, and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	10	55

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of producers adopting new technologies, strategies, or systems.
2	Number of producers increasing production levels.
3	Number of producers decreasing production inputs/expenses.
4	Number of producers improving their environmental stewardship.

**Outcome #1****1. Outcome Measures**

Number of producers adopting new technologies, strategies, or systems.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	2500	5371

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
307	Animal Management Systems

**Outcome #2****1. Outcome Measures**

Number of producers increasing production levels.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	2000	4297

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
307	Animal Management Systems

**Outcome #3****1. Outcome Measures**

Number of producers decreasing production inputs/expenses.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2007	2000	4297

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
307	Animal Management Systems

**Outcome #4****1. Outcome Measures**

Number of producers improving their environmental stewardship.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2007	1000	2148

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
307	Animal Management Systems

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations

**Brief Explanation**

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

- Retrospective (post program)
- Time series (multiple points before and after program)
- Case Study

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #7**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Animal Protection

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
311	Animal Diseases	40%		40%	
312	External Parasites and Pests of Animals	10%		10%	
313	Internal Parasites in Animals	10%		10%	
314	Toxic Chemicals, Poisonous Plants, Naturally Occurring Toxins, and Other Hazards Affecting Animals	10%		10%	
315	Animal Welfare/Well-Being and Protection	30%		30%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	7.5	0.0	3.0	0.0
<b>Actual</b>	0.5	0.0	1.2	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
14375	0	54483	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
14375	0	26063	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	96776	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Research and Extension programs were conducted in the following areas:

- Forage Testing
- Ration Recommendations
- Beef Quality Assurance
- Farm-to-Feedlot Project
- Stocker Grazing Program
- Forage Variety Evaluation Publications
- Annual Mississippi Dairy Enterprise Planning Budgets for various sizes of typical dairy operations in the state
- Workshops for dairy producers of the use and value of dairy budgets in the management of their dairy farms
- Enrollment on the Dairy Herd Improvement Assn.
- Heat Abatement Training
- DHIA herd management screening
- Statewide Dairy Field Day
- Dairy Nutrition Workshops
- Reproductive Management
- BCIA sponsored sales
- Swine Producers Extension Program
- Swine Managers Training
- Environmental Continuing Education Classes
- Dietary analyses and consultation
- Pork Quality Assurance Program
- Swine Welfare and Assurance Program

**2. Brief description of the target audience**

The target audience for this program includes beef, dairy, swine, and equine producers (full- and part-time) and related industry personnel.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	51373	12843	0	0
2007	1041	3797	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

Year	Target
Plan:	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	Extension	Research	Total
Plan			
2007	0	1	1

**V(F). State Defined Outputs**

**Output Target**

**Output #1****Output Measure**

- Number of producers attending seminars, workshops, short courses, and demonstrations.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	8562	806

**Output #2****Output Measure**

- Number of articles/abstracts in journals, proceedings, and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	5	10

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of producers adopting new technologies, strategies, or systems.
2	Number of producers improving overall heard health and/or protection.

**Outcome #1****1. Outcome Measures**

Number of producers adopting new technologies, strategies, or systems.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	1700	161

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
311	Animal Diseases
313	Internal Parasites in Animals
312	External Parasites and Pests of Animals

**Outcome #2****1. Outcome Measures**

Number of producers improving overall heard health and/or protection.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	1360	129

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results****4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
315	Animal Welfare/Well-Being and Protection
311	Animal Diseases
313	Internal Parasites in Animals
314	Toxic Chemicals, Poisonous Plants, Naturally Occurring Toxins, and Other Hazards Affecting Animals
312	External Parasites and Pests of Animals

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Government Regulations

**Brief Explanation**

In both research and extension, MSU overestimated the overall efforts we would undertake in this program. This has been addressed in the 2009-2013 plan.

**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Retrospective (post program)
- Time series (multiple points before and after program)
- Case Study

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #8**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Aquaculture Production

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
302	Nutrient Utilization in Animals	50%		50%	
306	Environmental Stress in Animals	15%		15%	
307	Animal Management Systems	10%		10%	
308	Improved Animal Products (Before Harvest)	25%		25%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	2.0	0.7	0.0	0.0
<b>Actual</b>	2.4	0.0	18.7	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
68202	0	55749	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
68202	0	221495	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	3866085	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Developed feeds and feeding practices for optimal nutrition, increased production, and improved water quality of pond-raised catfish.

Increased the reliability, efficiency, and cost-effectiveness of catfish fry production through the use of new and improved technologies.

Applied engineering approaches to design new or modified harvesting equipment.

Increased reliability, efficiency, and cost-effectiveness of catfish production through the use of new and improved culture system technologies.

Developed referred journal articles and give scientific presentations at professional societies and at producer meetings.

Extension specialists conducted workshops and seminar programs. Extension publications and newsletters aided in transferring new knowledge to producers. Farm visits helped producers adapt new procedures on farms.

**2. Brief description of the target audience**

The target audience for this program includes producers of catfish, crayfish, and freshwater prawns, and related industry personnel.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	2716	679	0	0
2007	1751	4211	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

Year	Target
Plan:	1
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	Extension	Research	Total
Plan			
2007	2	12	14

**V(F). State Defined Outputs**

**Output Target**

**Output #1****Output Measure**

- Number of producers attending seminars, workshops, short courses, and demonstrations.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	453	994

**Output #2****Output Measure**

- Number of articles/abstracts in journals, proceedings, and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	10	46

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of producers adopting new technologies, strategies, or systems.
2	Number of producers improving production efficiency.
3	Number of producers improving their environmental stewardship.

**Outcome #1****1. Outcome Measures**

Number of producers adopting new technologies, strategies, or systems.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	100	199

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
302	Nutrient Utilization in Animals
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)
306	Environmental Stress in Animals

**Outcome #2****1. Outcome Measures**

Number of producers improving production efficiency.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	80	159

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

## Results

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems
302	Nutrient Utilization in Animals
308	Improved Animal Products (Before Harvest)
306	Environmental Stress in Animals

### Outcome #3

#### 1. Outcome Measures

Number of producers improving their environmental stewardship.

#### 2. Associated Institution Types

- 1862 Extension
- 1862 Research

#### 3a. Outcome Type:

Change in Action Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	40	79

#### 3c. Qualitative Outcome or Impact Statement

**Issue (Who cares and Why)**

**What has been done**

**Results**

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
302	Nutrient Utilization in Animals
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)
306	Environmental Stress in Animals

### V(H). Planned Program (External Factors)

#### External factors which affected outcomes

- Economy
- Public Policy changes

#### Brief Explanation

The number of extension direct contacts was overestimated in the plan. Extension agents and specialists are using more technology-based methods, thereby demonstrating an increase in indirect contacts and a decrease in direct contacts. This has been addressed in the 2009-2013 plan of work.

### V(I). Planned Program (Evaluation Studies and Data Collection)

#### 1. Evaluation Studies Planned

- Retrospective (post program)
- Before-After (before and after program)
- Time series (multiple points before and after program)
- Case Study

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #9**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Aquaculture Health

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
311	Animal Diseases	35%		35%	
312	External Parasites and Pests of Animals	15%		15%	
313	Internal Parasites in Animals	15%		15%	
315	Animal Welfare/Well-Being and Protection	35%		35%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	1.5	0.0	0.0	0.0
<b>Actual</b>	0.4	0.0	0.7	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
11587	0	5460	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
11587	0	15196	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	511907	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Developed diagnostic tools to detect and monitor diseases in commercially raised channel catfish and determine virulence factors associated with those diseases.

Developed fish health management procedures to control economically important diseases of channel catfish.

Determined factors associated with emerging diseases in pond-raised channel catfish.

Used epidemiological methods to investigate new and emerging diseases, and to identify environmental and management factors that influence the onset and severity of disease outbreaks.

Prepared referred journal articles and give scientific presentations at professional societies and at producer meetings.

Extension specialists conducted workshops and seminar programs. Extension publications and newsletters aided in transferring new knowledge to producers. Farm visits helped producers adapt new procedures on farms.

**2. Brief description of the target audience**

The target audience for this program is producers of catfish, crayfish, and freshwater prawns and related industry personnel.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	2222	555	0	0
2007	261	1130	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

Year	Target
Plan:	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	Extension	Research	Total
Plan			
2007	1	1	2

**V(F). State Defined Outputs**

**Output Target**

**Output #1****Output Measure**

- Number of producers attending seminars, workshops, short courses, and demonstrations.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	370	232

**Output #2****Output Measure**

- Numbers of articles/abstracts in journals, proceedings and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	10	7

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of producers adopting new technologies, strategies, or systems.
2	Number of producers improving fish health management production efficiency.

**Outcome #1****1. Outcome Measures**

Number of producers adopting new technologies, strategies, or systems.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	50	46

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
315	Animal Welfare/Well-Being and Protection
313	Internal Parasites in Animals
312	External Parasites and Pests of Animals
311	Animal Diseases

**Outcome #2****1. Outcome Measures**

Number of producers improving fish health management production efficiency.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	40	37

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

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**Results****4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
311	Animal Diseases
315	Animal Welfare/Well-Being and Protection
313	Internal Parasites in Animals
312	External Parasites and Pests of Animals

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Government Regulations
- Competing Programmatic Challenges

**Brief Explanation**

In extension, MSU overestimated the overall efforts we would undertake in this program. This has been addressed in the 2009-2013 plan.

**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Retrospective (post program)
- Case Study

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #10****V(A). Planned Program (Summary)****1. Name of the Planned Program**

Forestry

**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
122	Management and Control of Forest and Range Fires	20%		20%	
123	Management and Sustainability of Forest Resources	45%		45%	
124	Urban Forestry	10%		10%	
125	Agroforestry	15%		15%	
133	Pollution Prevention and Mitigation	10%		10%	
	<b>Total</b>	<b>100%</b>		<b>100%</b>	

**V(C). Planned Program (Inputs)****1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	13.0	0.0	0.9	0.0
<b>Actual</b>	13.0	0.0	8.3	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
368971	0	157046	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
368971	0	50948	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	498874	0

**V(D). Planned Program (Activity)****1. Brief description of the Activity**

Research was conducted in forest production and management, timber harvesting, forest recovery, and environmental impacts of forest practices. Extension programming was conducted to share this information with forest landowners and industry personnel.

**2. Brief description of the target audience**

The audience for this program includes forest landowners and industry personnel.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	66232	0	0	0
2007	44542	68415	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	1
2007 :	1

**Patents listed**

Method for Protein Purification and Recovery from Electrophoresis Gel

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	1	6	7

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of producers and industry attending seminars, workshops, short courses, and demonstrations.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	11039	18826

**Output #2**

**Output Measure**

- Number of articles/abstracts in journals, proceedings, and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	20	10

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of timber producers adopting new technologies and practices.
2	Number of forest producers increasing profitability of their forest operations.
3	Number of producers improving their environmental stewardship.

**Outcome #1****1. Outcome Measures**

Number of timber producers adopting new technologies and practices.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	2000	3765

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Many forest landowners do not have a forest management plan to use in reaching their management goals.

**What has been done**

Mississippi State University's Extension Forestry program secured funds from the American Tree Farm System as well as the Mississippi Sustainable Forestry Initiative-State Implementation Committee to conduct Tree Farm programs at County Forestry Association meetings across the state. These programs stressed the importance of having a management plan, how to have one developed, and how to become a Tree Farmer.

**Results**

Twenty eight programs were conducted across Mississippi for 1,089 participants. Of these, 120 applied to join the Tree Farm program, resulting in 120 new forest management plans developed affecting thousands of acres of Mississippi Forest Land. This is just one example of the adoption of new technologies and practices resulting from this program.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
124	Urban Forestry
133	Pollution Prevention and Mitigation
122	Management and Control of Forest and Range Fires
123	Management and Sustainability of Forest Resources
125	Agroforestry

**Outcome #2****1. Outcome Measures**

Number of forest producers increasing profitability of their forest operations.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	1600	3012

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
125	Agroforestry
124	Urban Forestry
133	Pollution Prevention and Mitigation
122	Management and Control of Forest and Range Fires

**Outcome #3**

**1. Outcome Measures**

Number of producers improving their environmental stewardship.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	800	1506

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
124	Urban Forestry
133	Pollution Prevention and Mitigation
122	Management and Control of Forest and Range Fires
125	Agroforestry
123	Management and Sustainability of Forest Resources

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Appropriations changes
- Government Regulations
- Competing Programmatic Challenges

**Brief Explanation**

The number of extension direct contacts was overestimated in the plan. Extension agents and specialists are using more technology-based methods, thereby demonstrating an increase in indirect contacts and a decrease in direct contacts. This has been addressed in the 2009-2013 plan of work.

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

- After Only (post program)

**Evaluation Results**

A follow-up study of participants in Tree Farm seminars found that 120 of the 1,089 participants had developed tree farm management plans and applied to join the Tree Farm program. Many more are expected to

**Key Items of Evaluation**

Promotion of the Tree Farm program will lead to private landowners developing tree farm management plans and applying to join the program.

**Program #11****V(A). Planned Program (Summary)****1. Name of the Planned Program**

Horticulture

**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	15%		15%	
204	Plant Product Quality and Utility (Preharvest)	15%		15%	
205	Plant Management Systems	60%		60%	
601	Economics of Agricultural Production and Farm Management	10%		10%	
	<b>Total</b>	<b>100%</b>		<b>100%</b>	

**V(C). Planned Program (Inputs)****1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	24.5	0.0	3.5	0.0
<b>Actual</b>	21.6	0.0	11.2	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
612120	0	323575	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
612120	0	176603	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	765070	0

**V(D). Planned Program (Activity)****1. Brief description of the Activity**

Research and extension activities were conducted to

1. Increase producer profitability by promoting cultural practices that are research based.
2. Improve marketing of horticultural crops.
3. Determine producer needs via interaction with commodity groups, grower meetings, advisory councils, etc.
4. Reduce economic and environmental impact of chemicals by implementing integrated pest management techniques in commercial production.
5. Increase production efficiency by decreasing labor requirements, i.e. mechanization, automation, etc.
6. Continue selection of appropriate varieties for local environments in Mississippi.

**2. Brief description of the target audience**

The target audience includes producers, manufacturers, suppliers, managers, and consumers, within the vegetable and fruit production, turf, floriculture, and ornamental nursery industries.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	157209	39302	0	0
2007	72807	144876	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	9	8	17

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of clientele attending seminars, workshops, short courses, and demonstrations.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	26201	36281

**Output #2**

**Output Measure**

- Number of articles/abstracts in journals, proceedings, and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	5	46

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of clientele adopting new technologies, strategies, systems, or cultivars.
2	Number of producers increasing profitability levels.
3	Number of clientele improving their environmental stewardship.

**Outcome #1****1. Outcome Measures**

Number of clientele adopting new technologies, strategies, systems, or cultivars.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	5000	7256

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
204	Plant Product Quality and Utility (Preharvest)
102	Soil, Plant, Water, Nutrient Relationships
601	Economics of Agricultural Production and Farm Management
205	Plant Management Systems

**Outcome #2****1. Outcome Measures**

Number of producers increasing profitability levels.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	4000	5805

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

## Results

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
102	Soil, Plant, Water, Nutrient Relationships
205	Plant Management Systems
204	Plant Product Quality and Utility (Preharvest)

### Outcome #3

#### 1. Outcome Measures

Number of clientele improving their environmental stewardship.

#### 2. Associated Institution Types

- 1862 Extension
- 1862 Research

#### 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	2000	2902

#### 3c. Qualitative Outcome or Impact Statement

**Issue (Who cares and Why)**

**What has been done**

## Results

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
102	Soil, Plant, Water, Nutrient Relationships
601	Economics of Agricultural Production and Farm Management
204	Plant Product Quality and Utility (Preharvest)

### V(H). Planned Program (External Factors)

#### External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges

#### Brief Explanation

The number of extension direct contacts was overestimated in the plan. Extension agents and specialists are using more technology-based methods, thereby demonstrating an increase in indirect contacts and a decrease in direct contacts. This has been addressed in the 2009-2013 plan of work.

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

- Retrospective (post program)
- Time series (multiple points before and after program)
- Case Study

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #12**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Nutrient Management/Water Quality

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	20%		20%	
111	Conservation and Efficient Use of Water	15%		15%	
401	Structures, Facilities, and General Purpose Farm Supplies	10%		10%	
402	Engineering Systems and Equipment	15%		15%	
403	Waste Disposal, Recycling, and Reuse	15%		15%	
404	Instrumentation and Control Systems	10%		10%	
405	Drainage and Irrigation Systems and Facilities	15%		15%	
<b>Total</b>		100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	8.0	3.1	0.0	0.0
<b>Actual</b>	1.1	0.0	12.2	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
31945	0	205324	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
31945	0	31648	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Research and extension activities were conducted to accomplish the following: formation of state and regional advisory groups, assignment of work groups to address specific issues and tasks associated with nutrient management and water quality, participation of targeted audiences such as agricultural producers in environmental education programs, development of publications, fact sheets, web pages and other educational materials as program support, and reporting documents. Specific programs targeted toward agricultural producers included environmental stewardship programs, waste pesticide collection and disposal programs, recycling and solid waste management programs, and other initiatives related to water quality and nutrient management.

**2. Brief description of the target audience**

Stakeholders and customers of research and Extension programs represent a broad section of audiences, including agricultural producers and other rural audiences, agricultural support groups, environmental and water quality agencies, consumers, and traditionally under-served groups.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	9379	2345	0	0
2007	2705	1869	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	4	8	12

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of producers attending seminars, workshops, short courses, and demonstrations.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	1563	762

**Output #2**

**Output Measure**

- Number of articles/abstracts in journals, proceedings, and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	5	16

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of producers adopting new technologies, strategies, or systems.
2	Number of producers improving their environmental stewardship.

**Outcome #1****1. Outcome Measures**

Number of producers adopting new technologies, strategies, or systems.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	300	152

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
405	Drainage and Irrigation Systems and Facilities
403	Waste Disposal, Recycling, and Reuse
102	Soil, Plant, Water, Nutrient Relationships
402	Engineering Systems and Equipment
111	Conservation and Efficient Use of Water
401	Structures, Facilities, and General Purpose Farm Supplies
404	Instrumentation and Control Systems

**Outcome #2****1. Outcome Measures**

Number of producers improving their environmental stewardship.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	240	61

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done****Results****4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
404	Instrumentation and Control Systems
405	Drainage and Irrigation Systems and Facilities
102	Soil, Plant, Water, Nutrient Relationships
401	Structures, Facilities, and General Purpose Farm Supplies
111	Conservation and Efficient Use of Water
403	Waste Disposal, Recycling, and Reuse
402	Engineering Systems and Equipment

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges

**Brief Explanation**

In extension, MSU overestimated the overall efforts we would undertake in this program. This has been addressed in the 2009-2013 plan.

**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Retrospective (post program)
- Time series (multiple points before and after program)
- Case Study

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #13**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Poultry

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
301	Reproductive Performance of Animals	10%		10%	
302	Nutrient Utilization in Animals	10%		10%	
305	Animal Physiological Processes	10%		10%	
306	Environmental Stress in Animals	10%		10%	
307	Animal Management Systems	10%		10%	
308	Improved Animal Products (Before Harvest)	10%		10%	
311	Animal Diseases	10%		10%	
312	External Parasites and Pests of Animals	10%		10%	
313	Internal Parasites in Animals	10%		10%	
315	Animal Welfare/Well-Being and Protection	10%		10%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	1.0	0.0	3.6	0.0
<b>Actual</b>	1.2	0.0	7.5	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
34053	0	323200	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
34053	0	298168	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	979230	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Extension personnel communicated with poultry producers and the general public through seminars, workshops, and extension bulletins and newsletters distributed in paper copy and electronically via the internet. Field demonstrations were used to encourage acceptance of new practices and methodologies. Results of research projects were published in peer-reviewed scientific journals. Research disseminated to the stakeholders consisted of the following:

- Flock hatchability and fertility
- Male broiler breeder viability measurements
- Dietary and managerial regimes to decrease layer Mycoplasma infections
- Optimizing early chick performance through: broiler and breeder nutrition, embryo physiological assessment, incubation management, and physiological assessment
- Applied nutrition with feed additives and alternative feed ingredients
- Ammonia management in broiler houses: minimization of nitrogen input, ammonia chemical modification and capture, and ammonia impacts on bird performance
- Minimization of physiological stress in broilers and layers
- Understanding broiler intestinal microorganisms and their role in nutrient utilization and disease
- Identification of physiological responses associated with poultry welfare.

**2. Brief description of the target audience**

The target audience for this program consists of commercial poultry producers and related industry personnel.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	1058	265	0	0
2007	891	1574	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	1	12	13

**V(F). State Defined Outputs**

**Output Target**

**Output #1****Output Measure**

- Number of producers attending seminars, workshops, short courses, and demonstrations.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	176	411

**Output #2****Output Measure**

- Number of articles/abstracts in journals, proceedings, and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	5	20

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of producers adopting new technologies, strategies, or systems.
2	Number of producers increasing production efficiency.
3	Number of producers reducing the environmental impact of production.

**Outcome #1****1. Outcome Measures**

Number of producers adopting new technologies, strategies, or systems.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	50	82

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Growth rates of modern commercial broilers have a tendency to be reduced, whereas efficiency of nutrient utilization and carcass yields have increased in modern strains of broilers. To optimize profitability in commercial broilers, amino acid feeding regimes must be fed in a strain-specific manner. Meeting amino acid needs in these new commercial strains must be assessed, but care should be taken as amino acid nutrition represents significant diet cost.

**What has been done**

Research utilizing and comparing commercial strains of broilers used in Mississippi was conducted with the emphasis of better understanding growth rate, feed conversion, and carcass yields to diets with increased amino acid density. Least cost formulated diets were formulated using digestible amino acids at levels near industry norms and then increased. In addition to measuring growth performance and yields, economic models were assessed to measure monetary income for commercial operations.

**Results**

Increasing amino acid regimes increased broiler live performance and carcass yields. Much of this response was due to the fact that modern commercial strains are consuming less and yielding more, and therefore feeding programs need to be adjusted. Increasing amino acid minimums 10% across all diets fed (0 to 55 days of age) resulted in a 0.50% increase in breast meat yield. This resulted in an income over feed costs increase of \$0.051/bird. However, increasing amino acids only to 35 days of age (the critical periods of growth) increased income over feed costs \$0.052/bird. These results point to the importance of feeding modern commercial broilers levels of amino acids needed to overcome reduced feed intake, especially early in life

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
311	Animal Diseases
315	Animal Welfare/Well-Being and Protection
313	Internal Parasites in Animals
306	Environmental Stress in Animals
302	Nutrient Utilization in Animals
308	Improved Animal Products (Before Harvest)
312	External Parasites and Pests of Animals
305	Animal Physiological Processes
307	Animal Management Systems
301	Reproductive Performance of Animals

**Outcome #2****1. Outcome Measures**

Number of producers increasing production efficiency.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	40	66

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
311	Animal Diseases
315	Animal Welfare/Well-Being and Protection
302	Nutrient Utilization in Animals
307	Animal Management Systems
306	Environmental Stress in Animals
305	Animal Physiological Processes
312	External Parasites and Pests of Animals
313	Internal Parasites in Animals
308	Improved Animal Products (Before Harvest)
301	Reproductive Performance of Animals

**Outcome #3****1. Outcome Measures**

Number of producers reducing the environmental impact of production.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	40	33

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)****What has been done**

## Results

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
315	Animal Welfare/Well-Being and Protection
301	Reproductive Performance of Animals
308	Improved Animal Products (Before Harvest)
307	Animal Management Systems
305	Animal Physiological Processes
302	Nutrient Utilization in Animals
312	External Parasites and Pests of Animals
313	Internal Parasites in Animals
306	Environmental Stress in Animals
311	Animal Diseases

### V(H). Planned Program (External Factors)

#### External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations
- Competing Programmatic Challenges

#### Brief Explanation

The number of extension direct contacts was overestimated in the plan. Extension agents and specialists are using more technology-based methods, thereby demonstrating an increase in indirect contacts and a decrease in direct contacts. This has been addressed in the 2009-2013 plan of work.

### V(I). Planned Program (Evaluation Studies and Data Collection)

#### 1. Evaluation Studies Planned

- Retrospective (post program)
- Time series (multiple points before and after program)
- Case Study

#### Evaluation Results

{No Data Entered}

#### Key Items of Evaluation

{No Data Entered}

**Program #14**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Wildlife and Fisheries

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
135	Aquatic and Terrestrial Wildlife	30%		30%	
136	Conservation of Biological Diversity	15%		15%	
214	Vertebrates, Mollusks, and Other Pests Affecting Plants	5%		5%	
314	Toxic Chemicals, Poisonous Plants, Naturally Occurring Toxins, and Other Hazards Affecting Animals	5%		5%	
605	Natural Resource and Environmental Economics	30%		30%	
722	Zoonotic Diseases and Parasites Affecting Humans	5%		5%	
903	Communication, Education, and Information Delivery	10%		10%	
<b>Total</b>		100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	8.5	0.0	0.6	0.0
<b>Actual</b>	9.2	0.0	2.6	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
261466	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
261466	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	427263	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

In-state and multistate research and extension activities were carried out related to wildlife habitat management, wildlife enterprise development, and human-wildlife conflicts.

**2. Brief description of the target audience**

The target audience for this project consists of most Mississippians, including those who hunt, fish, and watch wildlife, those who interact with wildlife and work and home, and those who work in related industries and professions.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	23736	5934	0	0
2007	28612	20404	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	3	7	10

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of clientele attending seminars, workshops, short courses, and demonstrations.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	3956	8169

**Output #2**

**Output Measure**

- Number of articles/abstracts in journals, proceedings, and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	4	9

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of clientele adopting recommended wildlife habitat improvement practices.
2	Number of wildlife professionals improving their skills in handling wildlife damage issues.
3	Number of non-industrialized, private landowners initiating wildlife-related enterprises.
4	Number of landowners reporting improved wildlife conservation due to management practices.
5	Number of clientele reporting increased income levels due to wildlife enterprises.

**Outcome #1****1. Outcome Measures**

Number of clientele adopting recommended wildlife habitat improvement practices.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	800	1634

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
903	Communication, Education, and Information Delivery
136	Conservation of Biological Diversity
314	Toxic Chemicals, Poisonous Plants, Naturally Occurring Toxins, and Other Hazards Affecting Animals
722	Zoonotic Diseases and Parasites Affecting Humans
605	Natural Resource and Environmental Economics
214	Vertebrates, Mollusks, and Other Pests Affecting Plants
135	Aquatic and Terrestrial Wildlife

**Outcome #2****1. Outcome Measures**

Number of wildlife professionals improving their skills in handling wildlife damage issues.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	100	480

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done****Results****4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
722	Zoonotic Diseases and Parasites Affecting Humans
214	Vertebrates, Mollusks, and Other Pests Affecting Plants
605	Natural Resource and Environmental Economics
136	Conservation of Biological Diversity
135	Aquatic and Terrestrial Wildlife
314	Toxic Chemicals, Poisonous Plants, Naturally Occurring Toxins, and Other Hazards Affecting Animals
903	Communication, Education, and Information Delivery

**Outcome #3****1. Outcome Measures**

Number of non-industrialized, private landowners initiating wildlife-related enterprises.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2007	320	480

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
214	Vertebrates, Mollusks, and Other Pests Affecting Plants
722	Zoonotic Diseases and Parasites Affecting Humans
605	Natural Resource and Environmental Economics
314	Toxic Chemicals, Poisonous Plants, Naturally Occurring Toxins, and Other Hazards Affecting Animals
136	Conservation of Biological Diversity
135	Aquatic and Terrestrial Wildlife
903	Communication, Education, and Information Delivery

**Outcome #4****1. Outcome Measures**

Number of landowners reporting improved wildlife conservation due to management practices.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	320	240

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
214	Vertebrates, Mollusks, and Other Pests Affecting Plants
903	Communication, Education, and Information Delivery
605	Natural Resource and Environmental Economics
314	Toxic Chemicals, Poisonous Plants, Naturally Occurring Toxins, and Other Hazards Affecting Animals
722	Zoonotic Diseases and Parasites Affecting Humans
135	Aquatic and Terrestrial Wildlife
136	Conservation of Biological Diversity

**Outcome #5****1. Outcome Measures**

Number of clientele reporting increased income levels due to wildlife enterprises.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	50	480

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)****What has been done****Results**

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
214	Vertebrates, Mollusks, and Other Pests Affecting Plants
903	Communication, Education, and Information Delivery
605	Natural Resource and Environmental Economics
722	Zoonotic Diseases and Parasites Affecting Humans
135	Aquatic and Terrestrial Wildlife
136	Conservation of Biological Diversity
314	Toxic Chemicals, Poisonous Plants, Naturally Occurring Toxins, and Other Hazards Affecting Animals

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations
- Competing Programmatic Challenges

**Brief Explanation****V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Retrospective (post program)
- Time series (multiple points before and after program)
- Case Study

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #15**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Early Care and Education

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
802	Human Development and Family Well-Being	80%		80%	
803	Sociological and Technological Change Affecting Individuals, Families and Communities	20%		20%	
<b>Total</b>		100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	13.5	0.0	0.0	0.0
<b>Actual</b>	11.9	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
336468	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
336468	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Extension activities were conducted to accomplish the following:

Train FCS Area Agents & early childhood staff (Educators) in content & teaching techniques as it relates to children ages 0-5 & 6-12.

Train Child and Family Development (CFD) Area Agents and project staff in parent education as related to readiness issues

CFD Area Agents & project staff collaborate with local organizations, agencies, and businesses.

CFD Area Agents & project staff serve as a community resource in childcare issues.

CFD Area Agents & project staff produce & distribute newsletters, news articles, publications, and training calendar.

CFD Area Agents & project staff design, facilitate & conduct direct trainings, & distance trainings.

CFD Area Agents & project staff, develop, & implement evaluation strategies.

CFD Area Agents & project staff market program (including distance ed.) among agencies & in local media, produce flyers.

CFD Area Agents & project staff provides mandated staff development training to keep providers in good standing with legal requirements.

CFD Area Agents & project staff provide technical assistance to providers & businesses.

CFD Area Agents and project staff will receive/ maintain ECERS; ITERS; and FDCRS Certification.

**2. Brief description of the target audience**

In general, audience for this program is families and communities. Specifically, the following groups are target audiences:

Early Care & Education Providers, including Directors, Center-based professionals, Family Childcare providers, and School-age providers.

- Industry/Business owners
- Parents
- Grandparents
- Agencies
- Professional Organizations
- Elementary teachers
- Elected officials

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	103515	25879	0	0
2007	22300	96241	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	1	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of clientele attending seminars, workshops, and short courses.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	17252	19757

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of clientele increasing knowledge in child care and development content areas.
2	Number of care providers maintaining certification requirements.
3	Number of care providers increasing the quality of care provided.

**Outcome #1****1. Outcome Measures**

Number of clientele increasing knowledge in child care and development content areas.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	3400	3951

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
802	Human Development and Family Well-Being

**Outcome #2****1. Outcome Measures**

Number of care providers maintaining certification requirements.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	2720	3161

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

With 67% of parents with children under age 6 in the workforce, every day in Mississippi approximately 97,000 children under age 6 spend time in the care of someone other than their parent. Most (51.19%) live in rural areas of the state. The teachers who care for these children are required by state licensure to complete 15 hours annually in childcare provider training. Having access and outreach to professional training in rural areas is a need for many early childhood teachers.

**What has been done**

Child & Family Development Area Agents and MSCCR&R trainers provided multiple delivery methods for participants at remote sites and on-site 'reality-based' programs that were broadcast live from a nationally accredited childcare center along with face-to-face workshops. The team developed collaborative program designs and formats to actively engage learners. There were over 9,020 participants at all the training sessions in 76 out of the 82 counties.

### Results

Research continues to support that a child's experiences during the first three years of his life can have a definitive impression upon how his brain is 'connected.' Every simple act of loving, talking to the child, reading and singing promote the actual physical development of the child's brain significantly faster and more fully than if these acts were not done. The social, emotional, cognitive, and physical development of children is dependent upon the quality of interactions with caregivers and the environment established by child caregivers. Therefore, providing quality research-based trainings improve the quality of care that a child receives ensuring that the child is ready to enter kindergarten and be successful.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities
802	Human Development and Family Well-Being

### Outcome #3

#### 1. Outcome Measures

Number of care providers increasing the quality of care provided.

#### 2. Associated Institution Types

•1862 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	1360	1581

#### 3c. Qualitative Outcome or Impact Statement

**Issue (Who cares and Why)**

**What has been done**

**Results**

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being
803	Sociological and Technological Change Affecting Individuals, Families and Communities

### V(H). Planned Program (External Factors)

#### External factors which affected outcomes

- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations

### **Brief Explanation**

The number of extension direct contacts was overestimated in the plan. Extension agents and specialists are using more technology-based methods, thereby demonstrating an increase in indirect contacts and a decrease in direct contacts. This has been addressed in the 2009-2013 plan of work.

### **V(I). Planned Program (Evaluation Studies and Data Collection)**

#### **1. Evaluation Studies Planned**

- Before-After (before and after program)

#### **Evaluation Results**

The Nurturing Homes Initiative evaluation has consistently shown that through workshops with family daycare providers, the care environment can be improved. Comparisons of pre- and post-ratings of the care environment using the Family Day Care Rating Scale (FDCRS) have shown consistent improvement on all 7 sub-scales.

#### **Key Items of Evaluation**

Providing training for family daycare providers consistently leads to improved care environments as measured by the Family Day Care Rating Scale.

**Program #16****V(A). Planned Program (Summary)****1. Name of the Planned Program**

Family Resource Management

**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
801	Individual and Family Resource Management	100%		100%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)****1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	12.0	0.0	0.0	0.0
<b>Actual</b>	7.8	0.0	14.9	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
219960	0	14443	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
219960	0	83120	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	1601570	0

**V(D). Planned Program (Activity)****1. Brief description of the Activity**

Extension programming will be conducted using the following methods: Workshops, group training; Information fairs; One-on-one consultations; Media-news, radio, TV; Publications, printed and web-based information; and Newsletters, in-print and email.

**2. Brief description of the target audience**

The target audience for this program includes almost all of the 2.8 million Mississippians.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	59189	14797	0	0
2007	28089	41350	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	25	13	38

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of clientele attending seminars, workshops, and short courses.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	9865	11573

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of clientele adopting new practices related to financial management.
2	Number of clientele reducing debt.
3	Number of clientele increasing wealth.

**Outcome #1****1. Outcome Measures**

Number of clientele adopting new practices related to financial management.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	2000	2315

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
801	Individual and Family Resource Management

**Outcome #2****1. Outcome Measures**

Number of clientele reducing debt.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	1600	1852

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
801	Individual and Family Resource Management

**Outcome #3****1. Outcome Measures**

Number of clientele increasing wealth.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	800	926

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
801	Individual and Family Resource Management

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Economy
- Competing Programmatic Challenges

**Brief Explanation**

The number of extension direct contacts was overestimated in the plan. Extension agents and specialists are using more technology-based methods, thereby demonstrating an increase in indirect contacts and a decrease in direct contacts. This has been addressed in the 2009-2013 plan of work.

**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Retrospective (post program)
- Before-After (before and after program)
- Case Study

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #17****V(A). Planned Program (Summary)****1. Name of the Planned Program**

Human Health

**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
724	Healthy Lifestyle	100%		100%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)****1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	14.5	0.4	0.0	0.0
<b>Actual</b>	9.4	0.0	4.1	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
266742	0	1547	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
266742	0	19394	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	493388	0

**V(D). Planned Program (Activity)****1. Brief description of the Activity**

Research in healthy lifestyles education will be complemented by Extension programming, including the following methods:

Training programs

Video conferences

Health fairs

Workshops

Partnership development

Needs assessment

Leadership training

Strategic planning

**2. Brief description of the target audience**

The audience for this program includes all Mississippians, with a specific focus on those who are overweight and/or have hypertension, and high blood cholesterol.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	137888	34472	0	0
2007	74535	111798	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	0	4	4

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of clientele attending workshops, seminars, and short courses.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	22981	31056

**Output #2**

**Output Measure**

- Number of articles/abstracts in journals, proceedings, and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	2	9

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of clientele reporting changes in lifestyle to improve health.
2	Number of clientele reporting decreases in at least one indicator (blood pressure, blood cholesterol, body mass index).

**Outcome #1****1. Outcome Measures**

Number of clientele reporting changes in lifestyle to improve health.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	4500	6211

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
724	Healthy Lifestyle

**Outcome #2****1. Outcome Measures**

Number of clientele reporting decreases in at least one indicator (blood pressure, blood cholesterol, body mass index).

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	3600	4969

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Mississippi ranks as the most obese state in the nation, 30.6% or nearly one in 3 adults has a body mass index (BMI) of 30 or greater. Mississippi is first in the nation with heart disease deaths, adult hypertension rate, and number of adults reporting no physical activity (31.6%); and second in the nation with 10.1% of adults reporting a diagnosis of diabetes.

**What has been done**

Mississippi In Motion (MIM) is a research based, peer-reviewed curriculum for a community based, 12-week program designed to promote healthy eating and to encourage positive physical activity behaviors for adults. The program is based on self-efficacy and social support to help bring about behavior change. Participants complete a pre-test and post-test; heights and weights are obtained and BMI's are calculated at the beginning of the program and at the end.

### Results

Since January 2007, over 20 counties have been in full swing with 12,357 attendees in the weekly educational sessions. Results of participants completing the program (n=727) indicated significant ( $p < .01$ ) decreases in pre-post BMI, blood pressure, blood glucose, body weight ( $p < .05$ ), and significant ( $p < .01$ ) increases in fruit and vegetable intake, water intake and physical activity. By the end of 2007, 1,205 participants lost more than 6,203 pounds and gained a new lease on life with overall improvements to their health. Consumers spend more than \$35 billion annually on weight-loss products and services. While many weight-loss programs are costly, participants in MIM pay a nominal fee of \$5.00, which funds the awards ceremony and prizes at the end of the program.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle

#### V(H). Planned Program (External Factors)

##### External factors which affected outcomes

- Economy
- Other (Cultural traditions)

##### Brief Explanation

The number of extension direct contacts was overestimated in the plan. Extension agents and specialists are using more technology-based methods, thereby demonstrating an increase in indirect contacts and a decrease in direct contacts. This has been addressed in the 2009-2013 plan of work.

#### V(I). Planned Program (Evaluation Studies and Data Collection)

##### 1. Evaluation Studies Planned

- Before-After (before and after program)

##### Evaluation Results

Participants in selected health programs were measured on a variety of health factors before and after participation: weight, body mass index, fruits and vegetables consumed, water consumed, amount of daily exercise (in some cases, total cholesterol and/or blood pressure were also measured). On average, almost 80 percent of those participating lost weight, and over 85 percent of those participating improved on at least one health measure.

##### Key Items of Evaluation

Mississippi in Motion, a program designed to get people to improve their diet and increase their exercise, was successful in helping participants in initial weight-loss and/or improvement in other health factors.

**Program #18**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Human Nutrition/Food Safety

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
703	Nutrition Education and Behavior	85%		85%	
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	15%		15%	
<b>Total</b>		100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	17.5	0.0	1.0	0.0
<b>Actual</b>	18.6	0.0	19.6	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
308065	0	102544	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
308065	0	168016	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	1774883	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Research and extension activities will be carried out, including  
 Partner with community groups and organizations to set up educational opportunities.  
 Train/Update professional and paraprofessionals on new USDA Food Pyramid and other related materials  
 Conduct educational programs as needed

Partner with local school systems to conduct health-based research.

**2. Brief description of the target audience**

The audience for this program consists of all Mississippians. Special emphasis is placed on those who historically have demonstrated poor nutrition behaviors, which includes low-income populations--both parents and children in these families are targeted. Food safety programming focuses on producers, processors, government regulators, food handlers, food retailers, and consumers.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	213891	133473	320000	0
2007	239603	664949	239603	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	3	29	32

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of clientele attending workshops, seminars, and short courses.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	88982	190693

**Output #2**

**Output Measure**

- Number of articles/abstracts in journals, proceedings, and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	2	90

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of clientele who learn how to use the food pyramid and nutritional guidelines to make food decisions.
2	Number of clientele who adopt practices to fit their diets within the dietary guidelines.
3	Number of clientele reporting improvements in food preparation techniques.
4	Number of clientele reporting improved health and/or well-being due to changes in diet.
5	Reduce the incidence of reported food-borne illnesses.

**Outcome #1****1. Outcome Measures**

Number of clientele who learn how to use the food pyramid and nutritional guidelines to make food decisions.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	18000	38139

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
703	Nutrition Education and Behavior
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

**Outcome #2****1. Outcome Measures**

Number of clientele who adopt practices to fit their diets within the dietary guidelines.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	14400	30511

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

## Results

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
703	Nutrition Education and Behavior

### Outcome #3

#### 1. Outcome Measures

Number of clientele reporting improvements in food preparation techniques.

#### 2. Associated Institution Types

- 1862 Extension
- 1862 Research

#### 3a. Outcome Type:

Change in Action Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	7200	30511

#### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

## Results

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

### Outcome #4

#### 1. Outcome Measures

Number of clientele reporting improved health and/or well-being due to changes in diet.

#### 2. Associated Institution Types

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	7200	15255

**3c. Qualitative Outcome or Impact Statement**

Issue (Who cares and Why)

What has been done

Results

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
703	Nutrition Education and Behavior

**Outcome #5****1. Outcome Measures**

Reduce the incidence of reported food-borne illnesses.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	0	0

**3c. Qualitative Outcome or Impact Statement**

Issue (Who cares and Why)

What has been done

Results

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
703	Nutrition Education and Behavior

**V(H). Planned Program (External Factors)**

External factors which affected outcomes

- Economy
- Competing Public priorities
- Competing Programmatic Challenges

**Brief Explanation**

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

- Retrospective (post program)
- Before-After (before and after program)
- Time series (multiple points before and after program)

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #19**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Family Leadership Development

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
805	Community Institutions, Health, and Social Services	100%		100%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	9.5	0.0	0.0	0.0
<b>Actual</b>	11.7	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
330198	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
330198	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Extension programming efforts on numerous aspects of leadership and volunteerism

**2. Brief description of the target audience**

The target audience for this program includes anyone interested in improving their community. Specific groups include master extension volunteers, 4-H volunteers, and community leaders.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	102452	25613	0	0
2007	125664	93166	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of clientele attending workshops, seminars, and short courses.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	17075	36472

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of clientele who improve their leadership skills.
2	Number of clientele who make use of leadership skills by volunteering for community organizations.

**Outcome #1****1. Outcome Measures**

Number of clientele who improve their leadership skills.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	3400	5835

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

**Outcome #2****1. Outcome Measures**

Number of clientele who make use of leadership skills by volunteering for community organizations.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	2720	2918

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

#### V(H). Planned Program (External Factors)

##### External factors which affected outcomes

- Economy
- Competing Programmatic Challenges

##### Brief Explanation

#### V(I). Planned Program (Evaluation Studies and Data Collection)

##### 1. Evaluation Studies Planned

- Retrospective (post program)
- Before-After (before and after program)

##### Evaluation Results

{No Data Entered}

##### Key Items of Evaluation

{No Data Entered}

**Program #20**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Family Life

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
802	Human Development and Family Well-Being	100%		100%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	4.5	0.0	0.3	0.0
<b>Actual</b>	0.0	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c 65346	1890 Extension 0	Hatch 0	Evans-Allen 0
<b>1862 Matching</b> 65346	<b>1890 Matching</b> 0	<b>1862 Matching</b> 0	<b>1890 Matching</b> 0
<b>1862 All Other</b> 0	<b>1890 All Other</b> 0	<b>1862 All Other</b> 0	<b>1890 All Other</b> 0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Research and extension programming will focus on family dynamics, parenting skills, human development, and aged care.

**2. Brief description of the target audience**

The target audience for this program includes all Mississippi families.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	34505	8626	0	0
2007	7769	40790	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	1	0	1

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of clientele attending workshops, seminars, and short courses.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	5751	8093

**Output #2**

**Output Measure**

- Number of articles/abstracts in journals, proceedings, and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	2	7

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of families adopting recommended family strategies and behaviors.
2	Number of families reporting improved strengthened family life.

**Outcome #1****1. Outcome Measures**

Number of families adopting recommended family strategies and behaviors.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	1100	1619

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
802	Human Development and Family Well-Being

**Outcome #2****1. Outcome Measures**

Number of families reporting improved strengthened family life.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	880	1295

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
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**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Economy
- Competing Programmatic Challenges

**Brief Explanation**

The number of extension direct contacts was overestimated in the plan. Extension agents and specialists are using more technology-based methods, thereby demonstrating an increase in indirect contacts and a decrease in direct contacts. This has been addressed in the 2009-2013 plan of work.

**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Retrospective (post program)

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #21**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Integrated Pest Management

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
205	Plant Management Systems	10%		10%	
206	Basic Plant Biology	5%		5%	
211	Insects, Mites, and Other Arthropods Affecting Plants	10%		10%	
212	Pathogens and Nematodes Affecting Plants	5%		5%	
213	Weeds Affecting Plants	5%		5%	
214	Vertebrates, Mollusks, and Other Pests Affecting Plants	5%		5%	
215	Biological Control of Pests Affecting Plants	10%		10%	
216	Integrated Pest Management Systems	50%		50%	
<b>Total</b>		<b>100%</b>		<b>100%</b>	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	3.5	0.0	0.2	0.0
<b>Actual</b>	4.1	0.0	10.3	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
115760	0	194359	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
115760	0	180058	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	632866	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Research and extension programming will be conducted many IPM areas, including the following:

- urban entomology and plant pathology
- plant disease and nematode diagnostics
- cotton pest management
- greenhouse tomato pest management
- soybean management by application of research and technology

**2. Brief description of the target audience**

The target audience for this program includes home pest control providers, homeowners, cotton producers, soybean producers, and greenhouse tomato producers.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	25603	6401	0	0
2007	11006	24885	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	0	10	10

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of clientele attending workshops, seminars, short courses, and demonstrations.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	4267	5982

**Output #2**

**Output Measure**

- Number of articles/abstracts in journals, proceedings, and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	2	49

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of producers adopting IPM production practices.
2	Number of producers increasing profits.
3	Number of producers reducing environmental impacts of pesticide use.

**Outcome #1****1. Outcome Measures**

Number of producers adopting IPM production practices.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	800	1196

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Invasive plant species directly impact row-crop agriculture (e.g., tropical spiderwort), pastureland (e.g., tropical soda apple), timberland (e.g., cogongrass), roadsides (e.g., kudzu), wetlands (e.g., alligatorweed), and waterways (e.g., waterhyacinth). The problem is caused by unrestricted introduction of species, inadequate monitoring and control, and ill-advised planting. The national cost of invasive plants has been estimated at over \$35B per year, at least \$20B in costs to agriculture.

**What has been done**

MSU has faculty focused on both terrestrial and aquatic invasive plant management. We have developed predictive models of habitat suitability for cogongrass and invasive aquatic plants. We are developing improved management methods and recommendations for invasive aquatic and terrestrial plants, translated into outreach products: the Weed Control Guidelines for Mississippi, fact sheets (six new fact sheets published in the past year), and a new webpage the Invasive Plant Atlas of the Mid-South.

**Results**

Our goal is to increase the efficiency of invasive species management and to increase allocations for managing invasive species in Mississippi. The potential payoff is huge, given that the cost of the problem of invasive species as a whole is estimated at over \$137B per year nationwide, with an estimated \$35B of this for invasive plant species alone.

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
216	Integrated Pest Management Systems
206	Basic Plant Biology
213	Weeds Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants
205	Plant Management Systems
214	Vertebrates, Mollusks, and Other Pests Affecting Plants
215	Biological Control of Pests Affecting Plants
212	Pathogens and Nematodes Affecting Plants

**Outcome #2****1. Outcome Measures**

Number of producers increasing profits.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	640	957

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)****What has been done****Results****4. Associated Knowledge Areas**

KA Code	Knowledge Area
216	Integrated Pest Management Systems
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants
215	Biological Control of Pests Affecting Plants
214	Vertebrates, Mollusks, and Other Pests Affecting Plants
211	Insects, Mites, and Other Arthropods Affecting Plants
213	Weeds Affecting Plants
206	Basic Plant Biology

**Outcome #3****1. Outcome Measures**

Number of producers reducing environmental impacts of pesticide use.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	640	479

**3c. Qualitative Outcome or Impact Statement****Issue (Who cares and Why)**

Cactus moth, which is one of the most successful biological control agents in history, has been transported around the world, in various prickly pear cactus control programs. By 2002, free-living populations of the moth had spread from the Florida Keys to the Florida Panhandle and South Carolina. In the United States, the moth threatens 31 species of native prickly pear cacti plus numerous other native species. In Mexico, 53 species of prickly pear are threatened, including 38 endemic species.

**What has been done**

MSU's GeoResources Institute, working with the U.S. Geological Survey and USDA-APHIS, in collaboration with the Government of Mexico, has developed an early detection and rapid response network that involves scientists, resource managers, and volunteers. MSU provides the cactus moth and prickly pear taxonomic experts to verify the species, the database and mapping program to track the moth and plants, and the training to over 300 volunteers to identify the prickly pear cactus and the moth.

### Results

This effort will potentially save cactus species in the southwestern United States and Mexico, maintaining biodiversity, and also help preserve cactus-based agriculture in Mexico, which is approximately 2% of total agricultural production. This moth will also threaten the horticultural use of cactus throughout the United States and Mexico. The potential cost of widespread invasion of the cactus moth is over \$100M per year, based on sales of prickly pear agricultural products, forage, wildlife food, and horticultural sales.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
215	Biological Control of Pests Affecting Plants
206	Basic Plant Biology
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants
216	Integrated Pest Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
213	Weeds Affecting Plants
214	Vertebrates, Mollusks, and Other Pests Affecting Plants

#### V(H). Planned Program (External Factors)

##### External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges

##### Brief Explanation

The number of extension direct contacts was overestimated in the plan. Extension agents and specialists are using more technology-based methods, thereby demonstrating an increase in indirect contacts and a decrease in direct contacts. This has been addressed in the 2009-2013 plan of work.

#### V(I). Planned Program (Evaluation Studies and Data Collection)

##### 1. Evaluation Studies Planned

- Retrospective (post program)
- Case Study

##### Evaluation Results

{No Data Entered}

##### Key Items of Evaluation

{No Data Entered}

**Program #22****V(A). Planned Program (Summary)****1. Name of the Planned Program**

Community and Business Analysis

**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
609	Economic Theory and Methods	100%		100%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)****1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	2.5	0.0	0.0	0.0
<b>Actual</b>	0.9	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
24914	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
24914	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)****1. Brief description of the Activity**

Extension personnel will assist communities by assisting them in conducting the following activities:  
Development of demographic, economic and fiscal profiles.

Development of economic analyses (eg., feasibility, impact, export-base, business plans, commuting, trade, shift share, location quotients).

Providing technical assistance. will be provided.

Holding community forums.

Taking strategic planning surveys (eg., market assessment, customer satisfaction, hospitality, health).

**2. Brief description of the target audience**

The target audience for this program consists of local communities and their leaders.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	21895	5474	0	0
2007	4762	3723	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	1	0	1

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of clientele attending workshops, seminars, and short courses.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	3649	1414

**Output #2**

**Output Measure**

- Number of local communities requesting economic analyses.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	30	20

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of community leaders improving their knowledge of factors influencing business success and local economies.
2	Number of local communities adopting recommended strategies to improve their local economy.
3	Number of local communities improving their local economy through retention and expansion of existing businesses and/or attraction of new businesses.

**Outcome #1****1. Outcome Measures**

Number of community leaders improving their knowledge of factors influencing business success and local economies.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	700	283

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
609	Economic Theory and Methods

**Outcome #2****1. Outcome Measures**

Number of local communities adopting recommended strategies to improve their local economy.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	20	15

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
609	Economic Theory and Methods

**Outcome #3****1. Outcome Measures**

Number of local communities improving their local economy through retention and expansion of existing businesses and/or attraction of new businesses.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2007	10	7

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
609	Economic Theory and Methods

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Economy
- Appropriations changes
- Public Policy changes

**Brief Explanation**

In extension, MSU overestimated the overall efforts we would undertake in this program. This has been addressed in the 2009-2013 plan.

**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Retrospective (post program)
- Case Study

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #23**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Community Health

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
608	Community Resource Planning and Development	100%		100%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	3.0	0.0	0.0	0.0
<b>Actual</b>	1.4	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
40064	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
40064	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Extension will assist local communities in conducting the following activities:

Develop market strategies

Conduct strategic planning workshops

Create provider surveys

Facilitate community forums

Publish a directory of local services

Develop quantitative profiles of health organizations

Conduct feasibility studies

Produce gap analyses

Promote coalition building trainings.

**2. Brief description of the target audience**

The target audience for this program is local communities and community leaders.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	25179	6295	0	0
2007	7659	6984	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	5	0	5

**V(F). State Defined Outputs**

**Output Target**

**Output #1****Output Measure**

- Number of clientele attending workshops, seminars, and short courses.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	4196	2441

**Output #2****Output Measure**

- Number of communities participating in community health improvement activities.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	30	18

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of community leaders improving their knowledge of local health care services and factors that influence their viability.
2	Number of communities adopting strategies to improve local care services.
3	Number of communities improving access to quality health care services.

**Outcome #1****1. Outcome Measures**

Number of community leaders improving their knowledge of local health care services and factors that influence their viability.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	800	488

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
608	Community Resource Planning and Development

**Outcome #2****1. Outcome Measures**

Number of communities adopting strategies to improve local care services.

**2. Associated Institution Types**

•1862 Extension  
•1862 Research

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	20	12

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Mississippi has the second to lowest number of physicians per capita in the nation. Clearly, this limits access to care for the state's citizens and contributes to many of the negative health status indicators plaguing the state.

**What has been done**

In response to this concern, Extension Service, in cooperation with Mississippi's community colleges, directs the Rural Medical Scholars (RMS) program. The objective of the program is to 'grow local docs' for the state by identifying talented and interested high school students and exposing them to academics and experiences relevant to the life of a family medicine physician. During the program, the Scholars enroll in two pre-medicine courses, 'shadow' local physicians, and participate in a variety of activities related to rural physicians.

### Results

Previous Scholars have recently started to arrive at the point in their academic careers when medical school is becoming a reality. Of the 92 that have completed college, fifteen graduates are currently enrolled in medical school and an additional two were our first physicians to graduate this May. In addition to future physicians, many others are going into nursing, and some are heading towards pharmacy, counseling, dentistry, physical or occupational therapy, and research. More than 75% of our graduates are pursuing or practicing a health-related career. The program is certainly beginning to pay dividends for the state. One of the first two Scholars to graduate from medical school is now part of a family medicine residency program. Upon completion of the program, he plans to return to practice in his hometown where the three family practice physicians in the county are close to retirement age.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

### Outcome #3

#### 1. Outcome Measures

Number of communities improving access to quality health care services.

#### 2. Associated Institution Types

- 1862 Extension
- 1862 Research

#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	10	6

#### 3c. Qualitative Outcome or Impact Statement

##### Issue (Who cares and Why)

Our state faces one simple fact - more people, per capita, develop potentially fatal diseases than elsewhere in the country and, when they do, it is more difficult for them to secure the care they need. The health problems of the state as a whole are a magnitude higher within the Delta region. The Mississippi Department of Employment Security has projected a 27% growth in the number of health care related positions in the Mississippi Delta between 2004 and 2014.

##### What has been done

Mississippi State University Extension developed a program to foster the pursuit of health careers by the youth of the Mississippi Delta. Working with middle school children, we designed a series of two weekend camps to increase their awareness of, and interest in, health career opportunities. Middle school is the age when children seriously begin to formulate their future career choices.

### Results

We cannot project how many of these students will ultimately pursue a health-related career. It is, however, a critical step in building a pipeline of future health care professionals. Those future providers will impact both the health and the economy of the area. The availability of more health care workers will facilitate the needs of more patients and the jobs will impact the economy of the region and provide individuals who come from this currently depressed environment a financially reasonable career possibility in their home region.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development

#### V(H). Planned Program (External Factors)

##### External factors which affected outcomes

- Economy
- Government Regulations
- Competing Programmatic Challenges

##### Brief Explanation

In extension, MSU overestimated the overall efforts we would undertake in this program. This has been addressed in the 2009-2013 plan.

#### V(I). Planned Program (Evaluation Studies and Data Collection)

##### 1. Evaluation Studies Planned

- Retrospective (post program)
- Case Study

##### Evaluation Results

{No Data Entered}

##### Key Items of Evaluation

{No Data Entered}

**Program #24**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Community Leadership Development

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
803	Sociological and Technological Change Affecting Individuals, Families and Communities	100%		100%	
<b>Total</b>		100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	1.5	0.0	0.0	0.0
<b>Actual</b>	3.0	0.0	13.3	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
83950	0	205	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
83950	0	13799	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	1280028	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Extension personnel will conduct the following leadership workshops and trainings:

- Asset-based development theory and practice
- Leadership principles
- Team building
- Managing groups
- Communication skills
- Conflict management
- Vision-to-action planning
- Evaluation skills

**2. Brief description of the target audience**

The target audience for the program includes existing and potential community leaders.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	13137	3284	0	0
2007	10239	81163	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	3	3	6

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of clientele attending workshops, seminars, and short courses.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	2189	15234

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of participants improving their knowledge and skills in public decision-making and engagement.
2	Number of participants implementing strategies to improve public decision-making and/or increase civic engagement.
3	Number of local communities reporting improved sustainability and engagement as a result of implemented strategies.

**Outcome #1****1. Outcome Measures**

Number of participants improving their knowledge and skills in public decision-making and engagement.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	400	3047

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families and Communities

**Outcome #2****1. Outcome Measures**

Number of participants implementing strategies to improve public decision-making and/or increase civic engagement.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	320	2437

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
803	Sociological and Technological Change Affecting Individuals, Families and Communities

**Outcome #3****1. Outcome Measures**

Number of local communities reporting improved sustainability and engagement as a result of implemented strategies.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Quantitative Target</b>	<b>Actual</b>
2007	20	32

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
803	Sociological and Technological Change Affecting Individuals, Families and Communities

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Economy
- Competing Public priorities
- Competing Programmatic Challenges

**Brief Explanation****V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Retrospective (post program)
- Case Study

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #25**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Community Tourism Development

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
608	Community Resource Planning and Development	100%		100%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	1.0	0.0	0.0	0.0
<b>Actual</b>	1.4	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
39983	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
39983	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Extension personnel will assist local communities by conducting the following activities:

Community forums

Focus groups

Business, resident, and inventory surveys

Leadership development courses

Tourism development workshops

Customer service/hospitality trainings

**2. Brief description of the target audience**

The target audience for this program includes local communities and community leaders.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	7663	1916	0	0
2007	7727	38752	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	1	0	1

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of participants in workshops, seminars, and short courses.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	1277	3873

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of participants improving their knowledge of tourism-related concepts.
2	Number of communities implementating strategies for improvement, development, and/or marketing of tourist attractions.
3	Number of communities reporting increased levels of tourist activity.

**Outcome #1****1. Outcome Measures**

Number of participants improving their knowledge of tourism-related concepts.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	250	775

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
608	Community Resource Planning and Development

**Outcome #2****1. Outcome Measures**

Number of communities implementating strategies for improvement, development, and/or marketing of tourist attractions.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	30	36

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
608	Community Resource Planning and Development

**Outcome #3****1. Outcome Measures**

Number of communities reporting increased levels of tourist activity.

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	20	24

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
608	Community Resource Planning and Development

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Economy
- Competing Programmatic Challenges

**Brief Explanation****V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Retrospective (post program)
- Case Study

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #26****V(A). Planned Program (Summary)****1. Name of the Planned Program**

Agribusiness/Risk Farm Management

**V(B). Program Knowledge Area(s)****1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
601	Economics of Agricultural Production and Farm Management	40%		40%	
604	Marketing and Distribution Practices	40%		40%	
610	Domestic Policy Analysis	20%		20%	
	<b>Total</b>	<b>100%</b>		<b>100%</b>	

**V(C). Planned Program (Inputs)****1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	4.5	0.0	3.3	0.0
<b>Actual</b>	3.0	0.0	4.3	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
84603	0	23196	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
84603	0	87315	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	554419	0

**V(D). Planned Program (Activity)****1. Brief description of the Activity**

This program includes three areas designed to assist farmers in making their enterprises more profitable:

The Farm Management Information and Training area provides farmers and agribusiness professionals with timely and relevant information on a variety of topics potentially impacting management decisions on their operations. It offers a number of practical decision aids along with training on the use of these aids as well as providing a resource for managers who need help with business planning.

The Extension Agricultural Marketing Information and Education area provides producers of major row crops, cattle, milk and dairy products, catfish, fruits and vegetables, and horticultural crops with regular, timely updates on conditions in these commodity markets. In addition, training will be made available on the use of commonly used marketing tools and strategies.

The Agricultural Policy Analysis and Education area provides producers, lenders and other input providers, and rural community leaders with timely and relevant information on existing farm, conservation, and international trade programs as well as analysis of the potential impact of proposed policy changes.

**2. Brief description of the target audience**

The target audience for this program consists primarily of agricultural producers and related agribusiness personnel.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	16289	4072	0	0
2007	6567	11426	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

**Year    Target**

**Plan:    0**

**2007 :    0**

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	7	2	9

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of producers attending workshops, seminars, and short courses.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	2715	2999

**Output #2**

**Output Measure**

- Number of articles/abstracts in journals, proceedings, and edited books.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	5	63

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of producers adopting recommended strategies in management, marketing, and government program use.
2	Number of producers indicating increased profitability due to implementation of recommended strategies.

**Outcome #1****1. Outcome Measures**

Number of producers adopting recommended strategies in management, marketing, and government program use.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	500	600

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
610	Domestic Policy Analysis
604	Marketing and Distribution Practices

**Outcome #2****1. Outcome Measures**

Number of producers indicating increased profitability due to implementation of recommended strategies.

**2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	400	480

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Americans spent just over ten percent of their disposable income on food in 2003. This amount is well below the peak level of 25.2 percent experienced in 1933. The percentage of disposable income Americans dedicate to food purchases has consistently fallen since 1947. This research focuses on a long-asserted source of the comparatively low proportion of consumer income devoted to food in the U.S., agricultural commodity policy.

**What has been done**

This research tested whether farm payments to producers contribute significantly to the proportion of disposable income devoted to food expenditures. Explanatory variables tested include total factor productivity in agriculture as a measure of changes in technology. The total level of consumer income is included in the model because we expect it to affect the proportion of income spent on food. The model also includes an annual calculation of a farm-to-retail price spread from USDA.

**Results**

This research which has been published in Food Policy has been presented at a USDA seminar and led to a follow-on analysis looking at international as well as U.S data which is forthcoming in the Journal of Agricultural and Applied Economics. The purpose of the article was to provide empirical econometric analysis of an issue with essentially no such information available. The implication of this research is to refute a belief that modifications of U.S. farm programs can significantly affect the risk of obesity; to the contrary, such scarce federal resources are better directed toward other efforts.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
610	Domestic Policy Analysis
601	Economics of Agricultural Production and Farm Management
604	Marketing and Distribution Practices

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges

**Brief Explanation****V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- Retrospective (post program)
- Time series (multiple points before and after program)
- Case Study

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}

**Program #27**

**V(A). Planned Program (Summary)**

**1. Name of the Planned Program**

Local Government Education and Training

**V(B). Program Knowledge Area(s)**

**1. Program Knowledge Areas and Percentage**

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
805	Community Institutions, Health, and Social Services	100%		100%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

**1. Actual amount of professional FTE/SYs expended this Program**

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	5.0	0.0	0.0	0.0
<b>Actual</b>	0.3	0.0	0.0	0.0

**2. Actual dollars expended in this Program (includes Carryover Funds from previous years)**

Extension		Research	
Smith-Lever 3b & 3c 8894	1890 Extension 0	Hatch 0	Evans-Allen 0
<b>1862 Matching</b> 8894	<b>1890 Matching</b> 0	<b>1862 Matching</b> 0	<b>1890 Matching</b> 0
<b>1862 All Other</b> 0	<b>1890 All Other</b> 0	<b>1862 All Other</b> 0	<b>1890 All Other</b> 0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Extension staff provide technical assistance to counties and municipalities in such areas as general management, financial administration, personnel administration, leadership development, economic development, community facilities and services, and solid waste management. Technical assistance is provided on a "time available" basis.

.Through these activities, program staff assist local government officials, local units of government, and associations of local government in their efforts to improve governance at the grassroots and delivery of services to the citizens of Mississippi.

**2. Brief description of the target audience**

This program serves the educational needs of the following associations of local government officials: Mississippi

Association of Supervisors, Mississippi Municipal League, Mississippi Association of County Board Attorneys,

Mississippi Municipal Clerks and Tax Collectors Association, Mississippi Chancery Clerks Association, Mississippi Association of County Administrators/ Comptrollers, Building Officials Association of Mississippi, Mississippi

Assessors and Collectors Association, Mississippi Chapter of International Association of Assessing Officers, and the Mississippi Association of County Engineers.

In cooperation with the State Department of Audit and the State Tax Commission, program personnel manage legislatively-mandated certification programs for county purchase clerks, receiving clerks, inventory control clerks, and tax assessors and manages professional education programs for county supervisors and county administrators. Program personnel have assisted the Office of the Secretary of State in coordinating a training program for county and municipal election officials. Also included are homeland security and emergency management officials at state and local levels.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	41600	10400	0	0
2007	2065	1351	0	0

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007 :	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Number of local government officials attending workshops, seminars, and short courses.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	8000	9872

**V(G). State Defined Outcomes****V. State Defined Outcomes Table of Content**

<b>O No.</b>	<b>OUTCOME NAME</b>
1	Number of local government officials improving their job-related knowledge and skills.
2	Number of local government officials obtaining required certifications.
3	Number of local government officials reporting improvement in work-related efficiency as a result of skills/knowledge learned and applied in their jobs.

**Outcome #1****1. Outcome Measures**

Number of local government officials improving their job-related knowledge and skills.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	4000	9872

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

**Outcome #2****1. Outcome Measures**

Number of local government officials obtaining required certifications.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	20	6000

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

**Outcome #3****1. Outcome Measures**

Number of local government officials reporting improvement in work-related efficiency as a result of skills/knowledge learned and applied in their jobs.

**2. Associated Institution Types**

•1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2007	1000	4250

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

**V(H). Planned Program (External Factors)****External factors which affected outcomes**

- Appropriations changes
- Government Regulations
- Competing Public priorities

**Brief Explanation**

In extension, MSU overestimated the overall efforts we would undertake in this program. This has been addressed in the 2009-2013 plan.

**V(I). Planned Program (Evaluation Studies and Data Collection)****1. Evaluation Studies Planned**

- After Only (post program)
- Retrospective (post program)
- Case Study

**Evaluation Results**

{No Data Entered}

**Key Items of Evaluation**

{No Data Entered}